



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OM8 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 4

Complete if Known

Application Number	10/673.719
--------------------	------------

Filing Date	9/29/2003
-------------	-----------

First Named Inventor	Michael Hu
----------------------	------------

Art Unit

Examiner Name

Attorney Docket Number	1142.1
------------------------	--------

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Ab. Haeberle

Date _____

Considered

11/14/06

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Compl to if Known

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2

of 4

Applicati n Number 10/673,719

Filing Dat 9/29/2003

First Named Inventor Michael Hu

Art Unit

Examiner Name

Attorney Docket Number 1142.1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Ch	2	BLOCK, H., Electro-rheology, J. Physics. D: Appl. Phys. 21, 1988, 1661-1677, IOP Publishing, UK.	
Ch	3	BOGUSH, G., Uniform Silica Particle Precipitation: An Aggregative Growth Model, J. Colloid and Interface Science, 3/1/01, 19-34, 142, 1, Academic Press, US.	
Ch	4	BOGUSH, G., Studies on the Formation of Monodisperse Silica Powders, Ultrastructure Proc. Adv. Ceramics, 1988, 477-486, Wiley, US.	
Ch	5	BOGUSH, G., Preparation of Monodisperse Silica Particles: Control of Size and Mass Fraction, J. Non-Crystalline Solids 104, 1988, 95-106, Amsterdam.	
Ch	6	COLON, L., Packing Columns for Capillary Electromatography, J. Chromatography A, 887, 2000, 43-53, Elsevier.	
Ch	7	GAST, A., Electrorheological Fluids as Colloidal Suspensions, Ad. in Colloid and Interface Science, 30, 1989, 153-203, Elsevier.	
Ch	8	HARRIS, M., Theoretical and Experimental Invest. of Growth of Silica and Titania Particles in Low Molecular Wt. Alcohols, Mat. Res. Soc. Symp. Proc, 271, 1992, 291-296, US.	
Ch	9	HARRIS, M., Base-Catalyzed Hydrolysis and Condensation Reactions of Dilute and Concentrated Teos Solutions, J. Non-Cryst. Solids 121, 1990, 397-403, Elsevier.	
Ch	10	LOOK, J., Colloidal Interactions During Precip. of Uniform Submicrometre Particles, Faraday Discuss. Chem. Soc., 90, 1990, 345-357.	
Ch	11	Martin, J., Electrorheology of a Model Colloidal Fluid, J. Colloid and Interface Sci., 167, 1994, 437-452, Academic Press, US.	

Examiner Signature	<i>Ch. Kasperala</i>	Date Considered	11/14/06
--------------------	----------------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 3

of 4

Complete if Known

Application Number	10/673,719
Filing Date	9/29/2003
First Named Inventor	Michael Hu
Art Unit	
Examiner Name	
Attorney Docket Number	1142.1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Qn	12	ZOU, H., Monolithic Stationary Phases for Liquid Chromatography and Capillary Electrochromatography, J of Chromatography A, 2002,5-32, 954.	
Qn	13	LUEDTKE, S., Towards the Ultimate Minimum Particle Diameter of Silica Packings in Capillary Electrochromatography, J of Chromatography A, 2000, 339-346, 887	
Qn	14	TANAKA, N., Monolithic Silica Columns for High-Efficiency Chromatographic Separations, J of Chromatography A, (2002), 35-49, 965.	
Qn	15	HERMANSON, K., Dielectrophoretic Assembly of Electrically Functional Microwires from Nanoparticle Suspensions, Science 11/01, 1082-1086, 294, USA.	
Qn	16	FUDOUZI, H., Assembling 100 nm Scale Particles by an Electrostatic Potential Field, J Nanoparticle Research, 2001, 193-200, 3, Kluwer Publishing, Netherlands.	
Qn	17	FRADEN, S., Electric-Field-Induced Association of Colloidal Particles, Physical Review Letters, 11/1989, 2373-2376, 63, 21, USA.	
Qn	18	STOBER, W., Controlled Growth of Monodisperse Silica Spheres in the Micron Size Range, J Colloid and Interface Science, 1968, 62-69, 26, USA.	
Qn	19	SANTACESARIA, E., Kinetics of Titanium Dioxide Precipitation by Thermal Hydrolysis, 5/1986, 44-53, 111, No. 1, Academic Press, USA.	
Qn	20	MIMOUNI, Z., Field-induced Structure in a Colloidal Suspension, Prog Colloid Polym Sci, 1990, 120-125, 81, Springer-Verlag, New York.	
Qn	21	PURSCH, M., Stationary Phases for Capillary Electrochromatography, 2000, 313-326, J of Chromatography A, 2000,887, Amsterdam.	

Examiner Signature	<i>Ch. Hagerole</i>	Date Considered	11/14/06
--------------------	---------------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 4

of

4

Application Number 10/673,719

Filing Date 9/29/2003

First Named Inventor Michael Hu

Art Unit

Examiner Name

Attorney Docket Number 1142.1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
AM	22	RATNAYAKE, C., Characteristics of Particle-Loaded Monolithic Sol-Gel Columns for Capillary Electrochromatography, J of Chromatography A, 2000, 277-285, 887, Amsterdam.	
AM	23	SCHWAN, H., Interactions Between Electromagnetic Fields and Cells, NATO Advanced Research Workshop, 1984, 97, 371, Plenum Press, NY.	
AM	24	SHER, L., On the Possibility of Nonthermal Biological Effects of Pulsed Electromagnetic Radiation, Biophysical Journal, 1970, 970-979, 10, USA.	
AM	25	SVEC, F., Design of the Monolithic Polymers Used in Capillary Electrochromatography Columns, J of Chromatography A, 2000, 3-29, 887, Elsevier.	
AM	26	TAKASHIMA, S., Alignment of Microscopic Particles in Electric Fields and Its Biological Implications, Biophysical Society, 4/1985, 513-518, 47, USA.	
AM	27	TANG, Q., Capillary Electrochromatography Using Continuous-Bed Columns of Sol-Gel Bonded Silica Particles with Mixed-Mode Octadecyl and Propylsulfonic Acid Functional	
		(continued) Groups, J of Chromatography A, 2000, 265-275, 887, Elsevier.	
AM	28	TANG, Q., Monolithic Columns Containing Sol-Gel Bonded Octadecylsilica for Capillary Electrochromatography, J of Chromatography A, 1999, 35-50, 837, Elsevier.	
AM	29	WINSLOW, W., Induced Fibration of Suspensions, Applied Physics, 1949, 1137-1140, 20, USA.	

Examiner Signature	<i>Alb. Noyes</i>	Date Considered	11/14/06
--------------------	-------------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.